

Technical Proposal for JX-CC2-698M4200M-4310FLP Cavity Combiner

- ◆ 5G Combiner
- ◆ Low PIM
- ◆ Ultra Wide Bandwidth
- ◆ Low Insertion Loss
- ◆ Outdoor / Indoor Use
- ◆ High Reliability

Revision History

Version	Date	Author	Revision description	Comment
V1.0	2022/06/27	Lee	Created	/
V1.1	2022/06/30	Lee	Updated the mechanical layout: COM port position 32mm→31.5mm	JingXin request

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Table of content

Technical Proposal for JX-CC2-698M4200M-4310FLP Cavity Combiner1
 1. Mechanical layout.....2
 2. Electrical analysis.....3
 2.1 Electrical specifications3
 2.2 The simulation curve4

Figures

Figure 1 JX-CC2-698M4200M-4310FLP front panel layout3
 Figure 2 The simulation curve of the LOW path4
 Figure 3 The simulation curve of the HIGH path5

Tables

Table 1 Mechanical specifications @ JX-CC2-698M4200M-4310FLP2
 Table 2 Electrical specifications @ JX-CC2-698M4200M-4310FLP3

1. Mechanical layout

Table 1 Mechanical specifications @ JX-CC2-698M4200M-4310FLP

Item	Parameter	Specification
1	Dimension	L x W x H: 146mm x 85mm x 37mm (Mounting bracket is not included)
2	Port connectors	4.3-10 / Female
3	Finish	Gray, Akzo Nobel RA7035, Powder spraying
4	Installation	Board / Wall
5	IP protection	IP67
6	Salt mist	EN 60068-2-11 / Ka Cass ST4
7	atm	65 KPa
8	Shock	Sawtooth pulse acc. AREMA 11.5.1 / 20G 11ms
9	Vibration	5G 5Hz to 200Hz, 2.5G 5Hz to 2000Hz
10	Humidity	95%RH 2cycles 2 24H 25°C to 55°C according to EN50155:2017 cyclic damp heat test (13.4.7)
11	Weight	≤1.1kg
12	Notes	Material shall be RoHS 6/6

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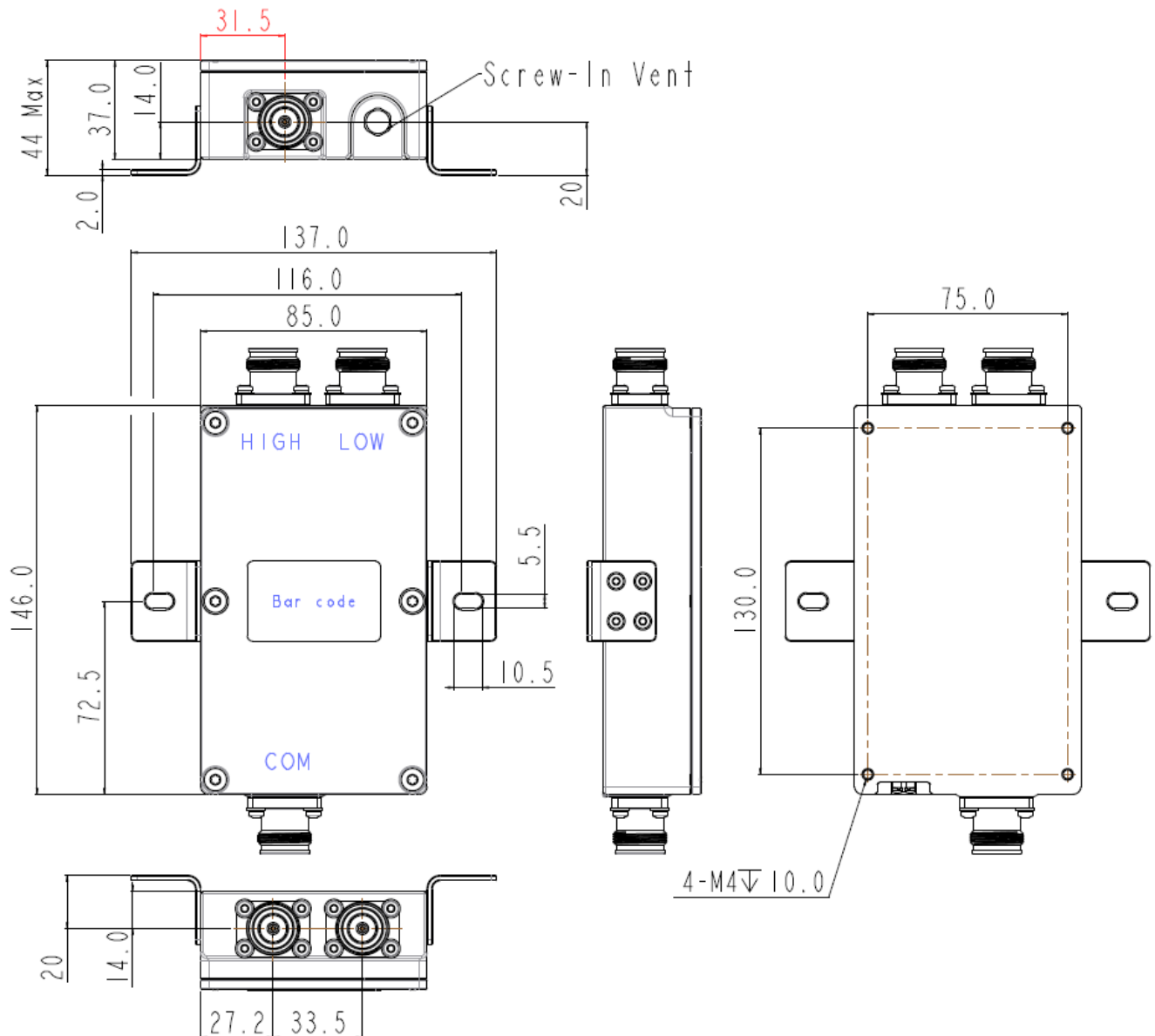


Figure 1 JX-CC2-698M4200M-4310FLP front panel layout

2. Electrical analysis

2.1 Electrical specifications

Table 2 Electrical specifications @ JX-CC2-698M4200M-4310FLP

Item	Parameter	LOW	HIGH
1	Frequency range	698-2690MHz	3300-4200MHz
2	Return loss	≥16dB	≥16dB

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3	Insertion loss	$\leq 0.3\text{dB}$	$\leq 0.3\text{dB}$
4	Ripple in band	$\leq 0.3\text{dB}$	$\leq 0.3\text{dB}$
5	Rejection	$\geq 30\text{dB}@3300-3800\text{MHz}$ $\geq 50\text{dB}@3800-4200\text{MHz}$	$\geq 60\text{dB}@698-2690\text{MHz}$
6	Average power	200W	
7	Peak power	1000W	
8	PIM	$\leq -155\text{dBc}@2*43\text{dBm}$	
9	Temperature range	-40°C to $+85^\circ\text{C}$	

2.2 The simulation curve

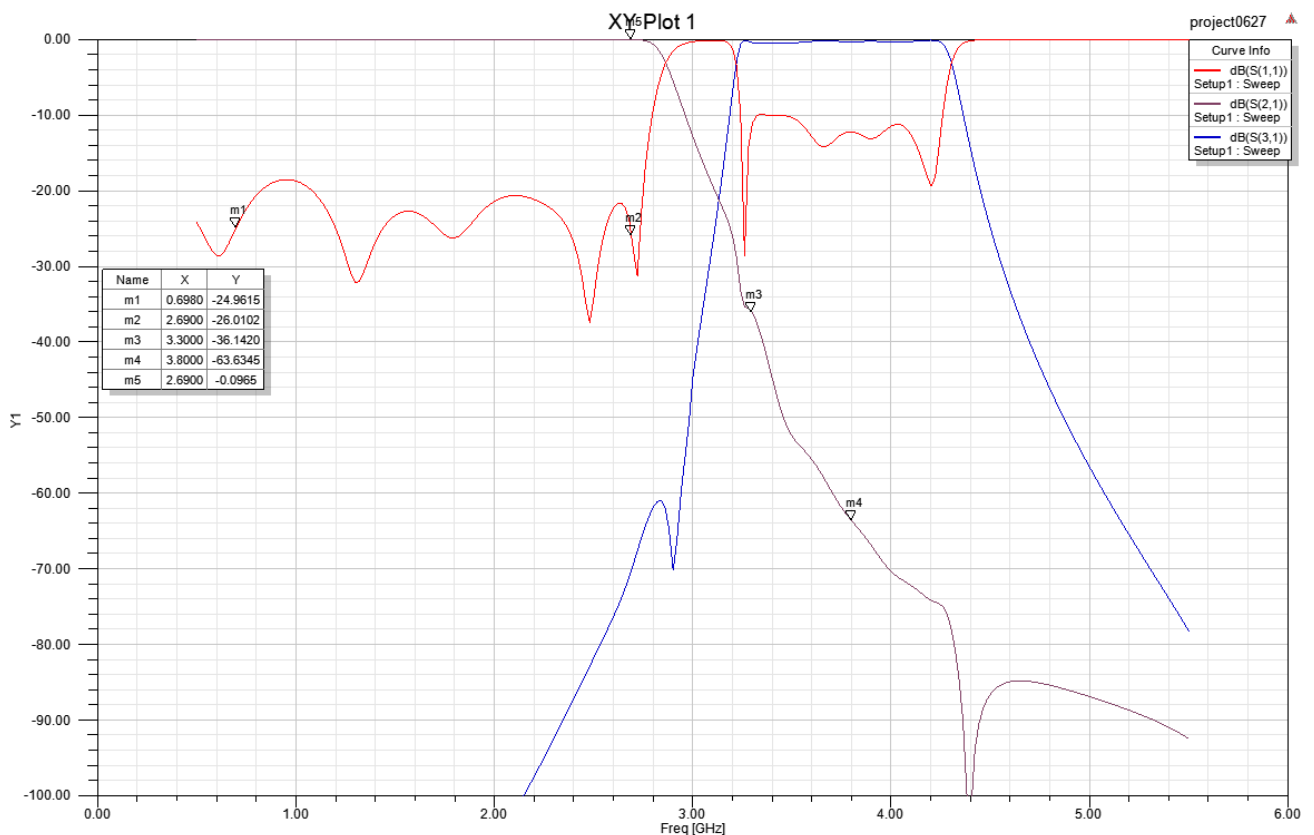


Figure 2 The simulation curve of the LOW path

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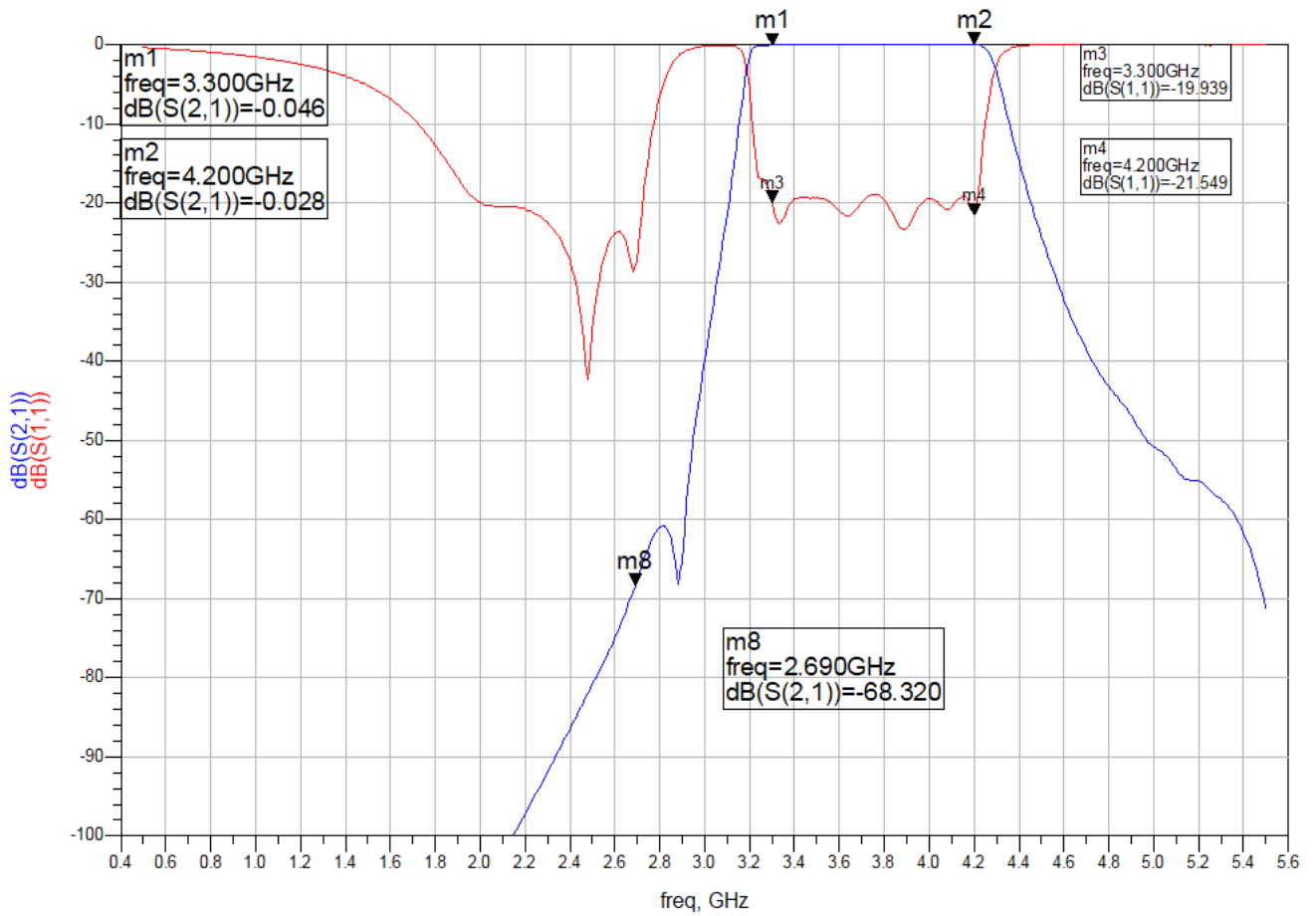


Figure 3 The simulation curve of the HIGH path

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